



OFFSHORE OPERATORS COMMITTEE

December 5, 2016

Mr. Isaac Chen (6WQ-PP)
U.S. - EPA Region 6
1445 Ross Ave.
Dallas, Texas 75202-2733

Re: Offshore Operators Committee
November 2016 Pre-Draft 2017-GMG290000 NPDES Permit
Summary, Comments and Agreements from November 15, 2016 Meeting

Dear Mr. Chen:

The Offshore Operators Committee (OOC), Water Sub-Committee respectfully submits for your review and consideration the attached table of summary notes, comments, and agreements from the meeting held on November 15, 2016 in Dallas, Texas. The meeting was held to discuss the November 2016 pre-draft of the 2017-GMG290000 NPDES permit renewal.

OOC appreciates the Agency's time and efforts on the permit renewal. Additionally, OOC appreciates the Agency's continued willingness to work together with industry and to keep the lines of communication open on the permit renewal. OOC believes this process will provide a protective and practical permit for all parties involved.

If you have any questions or if additional information is needed, please contact me at (504) 934-2159 or at greg@offshoreoperators.com, or Mr. James Durbin, CK Associates, at (225) 923-6925 or at james.durbin@c-ka.com.

Yours truly,

Greg Southworth
Associate Director
Offshore Operators Committee

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NPDES General Permit for New and Existing Sources and New Dischargers in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category for the Western Portion of the Outer Continental Shelf of the Gulf of Mexico (GMG290000)

OOO GMG290000 2017 Permit Renewal – November 2016 Pre-draft – Summary, Comments and Agreements from November 15, 2016 Meeting

Comment No.	Type/Category	Permit Section Ref.	November 2016 Pre – Draft Permit Wording	November 15, 2016 Comments and Agreements
1	NOI	Page 2 of cover	Operators located within the general permit area must submit an electronic Notice of Intent (NOI) that they intend to be covered. An operator may file one NOI to cover all discharges occurring within the same lease block and that NOI must be updated as necessary to identify additional discharges needing (or existing discharges no longer needing) authorization under this permit.	Following discussion, EPA indicated their intent all long was to permit on a facility by facility basis as opposed to lease area block. EPA will modify the language to address permitting for each facility to be consistent with how it is currently being done by operators.
2	NOI		<p>A Notice of Intent (NOI) must be filed to cover specific discharges prior to commencement of specified discharges. The primary operator must file an electronic Notice of Intent (eNOI) for discharges directly associated with oil/gas exploration, development or production activities to be covered by this permit. A separate eNOI is required for each lease block and that eNOI shall include all discharges controlled by the primary operator within the block. Other operators or vessel operators must file an eNOI to cover discharges which are directly under their controls but are not directly associated with exploration, development or production activities, only if such discharges are not covered by eNOIs filed by the primary operator. Individual coverage by this permit becomes effective when a complete eNOI is signed and submitted.</p> <p>The existing eNOIs under the 2012 issued permit are required to file new eNOI within 90 days from the effective date of this general permit. All existing eNOIs under the 2012 issued permit expire 90 days after the effective date of this general permit. If a paper NOI is submitted for a new coverage because the eNOI system is temporarily unavailable, the postmark date will be evidence of delivery for coverage. In such a case, filing an eNOI to replace the paper NOI will be required when the eNOI becomes available. During the down time of the eNOI system, operators may submit a short NOI which includes information a) through e) listed below via emails to angove.sharon@epa.gov. Official eNOIs shall be filed when the eNOI system becomes available. EPA may deny an NOI within 45 days after the filing. All NOIs shall include the following information:</p>	<p>Following discussion, EPA indicated their intent all long was to permit on a facility by facility basis as opposed to lease area block.</p> <ul style="list-style-type: none"> • Modify the language to address permitting for each facility to be consistent with how it is currently being done by operators. • EPA is considering allowing MODUS that are stacked not in transportation or conducting oil and gas activities to get coverage under this permit. As there is no current permitting mechanisms for discharges, except to apply for an individual permit. • EPA is working to remove default discharges when applying for coverage. • Due to program limitations, it appears that each facility may require at least one. Therefore, since there is no common discharge associated with all facilities, it was suggested to have Deck Drainage for both platforms and MODUS and Misc. Discharge for sub-sea as the defaults. Although this approach is acceptable, OOC's prefers not to have any defaults and be allowed to specifically choose discharge types. • EPA will provide clarifying language to indicate coverage under 2012 permit until apply for coverage under 2017 permit or a specific date. After this date, coverage under the 2012 permit will no longer be effective. • EPA will clarify how DMRs will be handled under each permit during fourth quarter 2017 and first quarter 2018.
3	NOI		Permittees who are located in lease blocks that (a) are neither in nor adjacent to "no activity" areas defined by the Department of Interior, or (b) do not require live-bottom surveys are required only to submit an eNOI to be covered by this general permit. Permittees who are located in lease blocks that are either in or adjacent to "no activity" areas or require live bottom surveys are required to submit both an eNOI to be covered that specifies they are located in such a lease block and are required to submit a notice of commencement of operations.	Discussion on what was "commencement of operations" and how that would be submitted. EPA agreed to remove this and to modify the permit language accordingly. (7.)
4	Effluent Limits and Monitoring Requirements	Part I.B	Note 2: EPA published the final rule "Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting" on Federal Register, Vol. 79, No. 160, August 29, 2014. The permittee must use test methods which are sensitive enough to detect the minimum quantification levels (MQLs) as provided in Appendix G of this permit.	Following discussion, EPA agreed to remove the note from this section because they were referring to Produced Water TRE language indicating MQLs. Per discussion, that language would be removed from the permit (see comment no.9) Operators should be using "sufficiently sensitive"

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				methods to test. These are already outlined in the permit specific test methods.
5	Drilling Fluids	Part I.B.1.a	<u>De Minimis Discharges of Non-aqueous Based Drilling Fluids.</u> De minimis discharges of non-aqueous based drilling fluids not associated with cuttings shall be contained to the extent practicable to prevent discharge. Allowable de minimis discharges can include wind blown drilling fluids from the pipe rack, residual drilling fluids that are adhered to marine risers, diverter systems testing after drilling fluids displacement, and blow-out preventers (BOPs) after drilling fluids displacement, and minor drips and splatters around mud handling and solids control equipment. Such de minimis discharges are not likely to be measurable and are not considered in the base fluids retained on cuttings limit. Such authorized de minimis discharges do not cover any consistent, continuous, or frequently occurring discharges or leakages.	<p>Following discussion, it was indicated that the intent was to not allow leaks from wells. OOC suggested removal of added language because it can lead to confusion on what is acceptable or not in terms of the definitions of “consistent, continuous or frequently”. Additionally, based on the discussion the added language does not belong in this section for acceptable De minimis discharges of Non-aqueous Based drilling Fluids.</p> <p>If the language should need to be left in the permit, OOC suggested EPA provide clarification on the intent and what this was actually referring to. OOC noted that in Part II.B.7, Spill Prevention Best Management Practices, the permit already addresses no spills or leaks.</p> <p><i>“This general permit does not authorize discharges, including spills and leaks, caused by failures of equipment, blowout, damage of facility, or any form of unexpected discharge.”</i></p> <p>EPA agreed to remove sentence to eliminate the confusion.</p>
6	Deck Drainage	Part I.B.3.a	<u>Free Oil.</u> No free oil shall be discharged, as determined by the visual sheen method on the surface of the receiving water. Monitoring shall be performed frequently when discharging, during conditions when an observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge, and the facility is manned. The number of days a sheen is observed must be recorded.	<p>Discussion on the intent and how to determine or define what is frequent enough when discharging. OOC suggested to change back to “once per day” consistent with the 2012 permit. Additionally, it was suggested to add language that any sheens seen throughout the day must be recorded in the records and reported appropriately.</p> <p>EPA agreed with this approach and would edit language accordingly.</p>
7	Produced Water	Part I.B.4.b.3	<p>3) Toxicity. A 7-day toxicity testing shall be performed once every six calendar months. [The operator may conduct the consequent test sooner than 6 months.]</p> <p>Toxicity testing for new discharges shall be conducted within 30 days after the discharge begins and continue every six months.</p> <p>Toxicity testing for existing discharges under the 2012 issued permit shall conduct the first semi-annual toxicity test within 6 months from the effective date of the permit.</p> <p>The consequent test shall be taken six months after the last test or as soon as practical if testing could not be performed within 6 month time frame due to incident beyond the control of the operator. Justification shall be provided and kept in the record if test is conducted beyond the time frame.</p> <p>Samples for monitoring produced water toxicity shall be collected after addition of any added substances, including seawater that is added prior to discharge, and before the flow is split from a common source for multiple discharge ports. For discharges with multiple ports that meet the minimum separation distance, if the discharge points have different flows and pipe diameters, the permittee may</p>	<p>Following discussion EPA agreed:</p> <ul style="list-style-type: none"> Change the testing frequency to Semi-annual based on the calendar of once during January -June and once during July – December. Add language to indicate that testing must be done no sooner than 3 months after the last tests. Adjust all similar language accordingly. Change 30 days after discharge begins for new discharges to 90 days to allow the system to get fully operational and volumes consistent. Remove “application of chemicals” in order to not cause a series of multiple toxicity tests during a monitoring period as a result of water treatment chemical adjustments that are made to ensure the treatment system is operating efficiently and as designed. Add language to indicate after passing for 3 consecutive months, the frequency returns to the frequency prior to the test failure.

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			<p>perform the test on the discharge with the highest calculated critical dilution. For discharges with multiple ports that do not meet the vertical separation distance requirements of Table 1-G or that have noncircular ports, the permittee shall calculate port size for tables 1-A through 1-F using an equivalent diameter representative of all openings, and use total flow. Equivalent diameter shall be calculated using:</p> <p>Equivalent Diameter = square root ($A_{total} * 4/\pi$), where A_{total} is the total area of all discharge openings in question.</p> <p>Samples also shall be representative of produced water discharges when hydrate inhibitors, scale inhibitors, corrosion inhibitors, biocides, paraffin inhibitors, well completion fluids, workover fluids, well treatment fluids, and/or hydrate control fluids are used in operations. The operator must conduct a new toxicity test if the sample used for the previous test did not represent the application of chemicals, or flow back of well completion fluids, workover fluids, well treatment fluids, or hydrate control fluids.</p> <p>If a test fails the survival or sub-lethal endpoint at the critical dilution in any test, the operator must perform monthly retest until it passes. The operator shall conduct Toxicity Reduction Evaluation (TRE) after the failure of the first retest. Failing the toxicity test is considered violation of the permit.</p>	
8	Produced Water	Part I.B.4.b.4	<p>4) Visual Sheen. The permittee shall monitor free oil using the visual sheen test method on the surface of the receiving water. Monitoring shall be performed frequently when discharging, during conditions when observation of a sheen on the surface of the receiving water is possible in the vicinity of the discharge, and when the facility is manned. The operator shall report "sheen" whenever sheen is observed during the day and to conduct inspection of treatment process and investigation of the cause of sheen, and keep a record of findings with the operator's daily log and make the record available for inspector's review.</p>	<p>Discussion on the intent and how to determine or define what is frequent enough when discharging. OOC suggested to change back to "once per day" consistent with the 2012 permit. Additionally, to add language that all sheens seen throughout the day must be recorded in the records and reported appropriately.</p> <p>EPA agreed with this approach and would edit language accordingly.</p>
9	Produced Water	Part I.B.4.c	<p>c. Additional Monitoring of Chemicals or Toxicity Reduction Evaluation</p> <p>If the discharge of produced water fails the 7-day chronic toxicity test, the operator is required to conduct Toxicity Reduction Evaluation (TRE) to identify causes or sources of toxic. The TRE shall include monthly monitoring of heavy metals and chemicals commonly found in produced water until it passes the toxicity retest. The operator shall monitor, but not limit to, the following constituents: benzene, ethyl benzene, naphthalene, toluene, Bis(2-ethylhexyl) phthalate, phenol, m-xylene, 2-butanone, cyanide, dissolved arsenic, dissolved cadmium, dissolved copper, dissolved lead, dissolved mercury, dissolved nickel, dissolved selenium, and dissolved zinc. Test methods must be sensitive enough to detect concentrations equal to or less than the Minimum Quantification Levels (MQLs) defined in Appendix E of the permit.</p> <p>The operator is required to submit its findings with corrective actions to EPA in accordance with Section I.A.5 of the permit. The operator shall identify the cause(s) of toxicity testing failures and fix the problem as soon as practicable.</p>	<p>Following discussion, EPA agreed to:</p> <ul style="list-style-type: none"> Only keep the first sentence in the paragraph and remove the rest of the paragraph Clarify what is required for the TRE. Root cause analysis, additional testing, etc.. In several cases operators can determine the cause of toxicity failures without a lengthy TRE process. OOC suggested the TRE approach be at the discretion of the operator when determining the cause of a toxicity failure. <p><i>TRE is optional</i></p>
10	Well Treatment Fluids, Completion	Part I.B.6.a	<p>Toxicity Test: If well treatment fluids, completion fluids, or workover fluids are to be discharged, a 7-day toxicity test must be conducted prior to the discharge to ensure the quantity of discharge will not be toxic to aquatic life. The critical dilution established for produced water as listed in If the flow back of</p>	<p>Following discussion, EPA will modify the language to remove toxicity testing from the permit and require an industry-wide study or an individual study by operators not participating in industry wide study.</p>

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	Fluids, and Workover Fluids		well treatment fluids, completion fluids, or workover fluids is discharged with produced water, a 7-day toxicity test for produced water must be started within 10 days after the application of such fluids.	Language for participation would be similar to that of produced water study in current permit. The intent of the study will be to include both Region 6 and Region 4 (i.e. Gulf wide). <i>Assessing Study</i>
11	Sanitary Waste (Facilities Continuously Manned for 30 or more consecutive days by 10 or More People)	Part I.B.7	<p>a. Prohibitions Solids. No floating solids may be discharged to the receiving waters. Observation for floating solids must be made following the morning, midday, and night meal and at a time during maximum estimated discharge. Observation must be made during daylight in the vicinity of sanitary waste outfalls. The number of days solids are observed must be recorded.</p> <p>b. Limitations Residual Chlorine. Total residual chlorine (TRC) is a surrogate parameter for fecal coliform. Proper chlorination shall apply. Discharge of TRC must meet a minimum of 1 mg/l and shall be maintained as close to this concentration as possible. A grab sample must be taken once per month and the concentration recorded. The approved methods are either Hach CN-66-DPD or EPA method specified in 40 CFR part 136 for TRC.</p>	<p>Following discussion, EPA agreed to:</p> <ul style="list-style-type: none"> Change language back to what is in the 2012 permit regarding frequency of monitoring for floating solids. Add MSD exemption language back and include language that in addition to being tested for proper operation, a third party certification or inspection form is required and must be kept with the facility records. Modify the NPDES inspection form used by BSEE inspectors to include the certification form requirement.
12	Sanitary Waste (Facilities Continuously Manned for 30 or more consecutive days by 9 or fewer persons or Intermittently manned by Any Number)	Part I.B.8	<p>a. Prohibitions Solids. No floating solids may be discharged to the receiving waters. Observation for floating solids must be made following the morning, midday, and night meal and at a time during maximum estimated discharge. Observation must be made during daylight in the vicinity of sanitary waste outfalls. The number of days solids are observed must be recorded.</p> <p>Residual Chlorine. Total residual chlorine (TRC) is a surrogate parameter for fecal coliform. Proper chlorination shall apply. A grab sample must be taken once per month and the concentration recorded. The approved methods are either Hach CN-66-DPD or EPA method specified in 40 CFR part 136 for TRC.</p>	<p>Following discussion, EPA agreed to:</p> <ul style="list-style-type: none"> Change language back to what is in the 2012 permit regarding frequency of monitoring for floating solids. Add MSD exemption language back and include language that in addition to being tested for proper operation, a third party certification or inspection form is required and must be kept with the facility records. Modify the NPDES inspection form used by BSEE inspectors to include the certification form requirement. Add language to indicate that if a facility has a treatment system on board that is capable of chlorination, then chlorination must be utilized and TRC measured for. If the facilities treatment system does not have chlorination capabilities, then TRC analysis is not required. Several facilities offshore do not have a treatment system capable of chlorination.
13	Domestic Waste	Part I.B.9.b	<p>b. Monitoring Requirements Observation for floating solids must be made following the morning, midday, and night meal and at a time during maximum estimated discharge. Observation must be made during daylight in the vicinity of domestic waste outfalls. The number of days solids are observed must be recorded.</p>	Following discussion, EPA agreed to change language back to what is in the 2012 permit regarding frequency of monitoring for floating solids.
14	Miscellaneous Discharges	Part I.B.10	<p>Miscellaneous discharges are further re-categorized as:</p> <p>(i) Filtered and Slurry: Desalinization Unit Discharge, Diatomaceous Earth Filter Media, Mud, Cuttings, and Cement (including cement tracer) at the Seafloor, and Excess Cement Slurry [Note: Discharges of cement slurry used for testing cement handling equipment are not authorized.]</p> <p>(ii) Chemical-free Seawater and Freshwater: Uncontaminated Ballast Water, Uncontaminated Bilge Water, Uncontaminated Freshwater, Uncontaminated Seawater, Boiler Blowdown, Source Water and Sand,</p> <p>(iii) Hydrate Control Fluids.</p> <p>(iv) Control Fluids: Blowout Preventer Control Fluid, Subsea Wellhead Preservation Fluid, Subsea Production Control Fluid, Umbilical Steel Tube Storage Fluid, Leak Tracer Fluid, Riser Tensioner Fluid, and Pipeline Brine (used as piping or equipment preservation fluids).</p>	<p>Following discussion:</p> <ul style="list-style-type: none"> OOO suggested removing the term "Chemical-free" as it is already defined in the permit definitions for uncontaminated. OOO suggested a process or procedure in the permit to request one-time approvals for misc. discharges that are not specifically addressed or listed in the permit. <i>add - due to work/over</i> OOO requested EPA add non oil discharges from "hot stabs" as previously requested to the list for Misc. discharges. This is typically in ounces of fluid.

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			(v) Fire Fighting Discharges: Aqueous Film Forming Foam (AFFF) or waters used for fire-fighter’s training or fire incidents. (vi) Bulk Transfer Operations Powder [Note: Authorized discharge is limited to dust emitted from vents that fall into water directly. No discharge of collected dust powder is authorized.] (vii) Non-specified Discharges: Any waste which is not specified in this permit is not authorized for discharge unless pre-approved by EPA.	EPA indicated they would consider the changes and did not see an issue with making them.
15	Miscellaneous Discharges of Seawater and Freshwater which have been chemically treated.	Part I.B.11.a	Free Oil. No free oil shall be discharged. Discharge is limited to those times that a visible sheen observation is possible unless the operator uses the static sheen method. Monitoring shall be performed using the visual sheen method on the surface of the receiving water frequently when discharging, or by use of the static sheen method daily at the operator's option. The number of days a sheen is observed must be recorded. Toxicity. The 48-hour minimum and monthly average minimum NOEC, must be equal to or greater than the critical dilution concentration specified in this permit in Appendix D, Table 2-A for seawater discharges and 2-B for freshwater discharges. Critical dilution shall be determined using Table 2 in Appendix D of this permit and is based on the discharge rate, discharge pipe diameter, and water depth between the discharge pipe and the bottom. The monthly average minimum NOEC value is defined as the arithmetic average of all 48-hour average NOEC values determined during the month. In cases where the discharge point for hydrostatic test water is subsea, such as the subsea end of a pipeline, and it is impractical to collect a sample at the discharge point, operators may collect a sample for this monitoring requirement prior to use of the fluid. [Note: If the discharge is expected lasting for 7 days or longer, a 7-day toxicity test, using 1/10th of critical dilution listed in Table 2 in Appendix D, must be performed.]	Discussion on the intent and how to determine or define what is frequent enough when discharging. OOC suggested to change back to “once per week” consistent with the 2012 permit. Additionally, to add language that all sheens seen throughout a day must be recorded in the records and reported appropriately. EPA agreed with this approach and would edit language accordingly. Additionally, OOC suggested the note be removed due to logistical reasons and unknowns of duration of some discharges. EPA agreed to remove this note.
16	Miscellaneous Discharges of Seawater and Freshwater which have been chemically treated.	Part I.B.11.a and Page 8 of Fact Sheet	[Note: Discharges treated by bromide, chlorine, or hypochlorite are not required for toxicity tests.] Fact Sheet: EPA, in 2012, determined that miscellaneous discharges treated by bromide, chlorine, or hypochlorite are not required for toxicity tests. But, uses of bromide, chlorine, or hypochlorite are still required to be in compliance with the technology-based quantity limits. In this proposed permit, the use of cathodic protection (via sacrificial anodes, Impressed Current Cathodic Protection, and/or others) is considered chemical treatment.	Following discussion, EPA agreed to: <ul style="list-style-type: none">• Change language in fact sheet to remove reference to cathodic protection as this is for structural integrity and not water treatment.• Add Copper and Aluminium ions generated using electric currents for water treatment as part of the exemption from toxicity in the permit for consistency with the Region 4 permit. Additionally, manufacturer details indicate that copper in solution is less than 2 ppb. Which at 100% discharge the copper concentration is lower than that of the marine chronic and acute criteria. When compared using the existing critical dilutions and NOECs from recent testing (previously submitted), the copper concentration is even lower than at 100% discharge when compared with the marine chronic and acute criteria.
17	Cooling Water Intake Structure Requirements	Part I.B.12.c.ii	ii. Entrainment monitoring/sampling. The operator must collect 24-hour entrainment samples from water withdrawn at all CWISs at the following frequency and duration based on the depth of the intake structure: 32 Intake Screen <= 100 Meters > 100 M, but > 200 M or Opening (M) <= 200 M Locates Below Water Surface	Following discussion, EPA agreed to remove the table and change the frequency for monitoring/sampling to once per calendar quarter. The frequencies stated in the table are unattainable due to transportation logistics and other operation issues. Additionally, as previously discussed, OOC requests the removal of entrainment monitoring/sampling requirement. 40 CFR 125.137 (iv).3

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			Frequency	Once/Week	Once/2-weeks	Once/2-weeks	provides the Director the flexibility to reduce the frequency of monitoring following 24 months of bimonthly monitoring provided that “seasonal variations in species and the numbers of individuals that are impinged or entrained “ can be detected. The report on the 24 month industry entrainment study (1) documents that many important Gulf of Mexico species were not detected at all in the regions where new facilities are expected to be installed so that entrainment impacts on these species will be zero; (2) provided documentation on the seasonal dependence of species and number of eggs and larvae available for entrainment, and (3) concludes that anticipated entrainment will have an insignificant impact on fisheries in any season; OOC believes that the intent of 40 CFR 125.137 has effectively been met and that the requirement for ongoing entrainment monitoring can be removed. Our request is based on the results of the recently completed Industry – wide Gulf of Mexico Cooling Water Intake Structure Entrainment Monitoring Study and reinforced by the quarterly entrainment monitoring reports recently submitted by individual operators. Industry believes that these results warrant removal of the entrainment monitoring/sampling because (a) the study showed that no meaningful impacts from entrainment are expected. (b) since no meaningful impact was found the seasonality of the impact is a moot point, (c) the SEAMAP database provides a continually-updated source of information that is functionally equivalent to permit-required monitoring for the purpose of estimating entrainment impacts. The final study reports are attached below and as Appendix C. The following is a brief summary of key findings of the industry entrainment monitoring study: 1. Study results provide data for enumeration of entrainment losses by species and for total egg and larval losses as required by the Permit. 2. Estimated entrainment impacts on ichthyoplankton are insignificant. A. Entrainment monitoring/sampling is required during the primary period of reproduction, larval recruitment, and peak abundance for each species, specifically, identified as part of the Source Water Biological Baseline Characterization Study (SWBBCS); however, the SWBBCS found no evidence to suggest CWIS would impact selected species of socioeconomic and ecological importance. B. In this study, catches of SWBBCS selected species were too low to statistically model (all exhibited >90% zeroes across tows; some 100% zeroes).
			Months	March and April (Total 8 samples)	March and April (Total 4 samples)	Between March 10 and April 20 (Total 2 samples)	
			Reporting		Total Entrainment and Total Sampling Events		

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				<p>C. Thus, no meaningful impacts from entrainment on these species are expected to occur.</p> <p>D. Daily entrainment was extremely small compared to the corresponding daily reference abundances drifting past each facility; thus, no meaningful impacts are expected for any species.</p> <p>3. Temporal and environmental influences on ichthyoplankton densities.</p> <p>A. While no impacts are expected to occur at any intake depth, the most prevalent influence was sampling depth, whereby densities declined exponentially with increasing depth.</p> <p>B. In general, the lowest densities occurred during the fall and greatest densities during the spring.</p> <p>4. Using SEAMAP data to estimate entrainment loss.</p> <p>A. Ichthyoplankton densities also declined exponentially with total water column depth; all study sites were deeper than the shallower depths (about ≤ 200 m) where sharp increases in densities began in the shoreward direction.</p> <p>B. For each of the study sites and across months, forecasted densities based on SEAMAP data were consistently 1½ to 2 times greater than those observed during this study.</p> <p>C. No impacts are expected based on densities estimated from either dataset.</p> <p>D. Thus, SEAMAP data appear adequate for future estimates of impacts on the ichthyoplankton community.</p> <p>The results of recent quarterly on-platform entrainment monitoring studies conducted by operators are fully consistent with the results of the Entrainment Monitoring Study. The concentrations of larvae of key socioeconomic and ecological important species were typically zero in these measurements. This is consistent with industry's views that (1) cooling water intake structures on offshore facilities present an insignificant risk to fisheries, (2) the quarterly monitoring requirement is providing no new useful information and (3) the requirement should be dropped entirely.</p>

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18	Cooling Water Intake Structure Requirements	Page 22 of Fact Sheet	<p>Fact Sheet, Page 22:</p> <p>Any new fixed facility installed after the effective date of this permit must equip with sea chests if its intake structures are located less than 100 meters below the sea surface.</p>	<p>Following discussion, it was indicated that EPA's understanding was that operators would want this so entrainment monitoring/sampling would not be required. Requiring installation of sea chests on all new facilities is not feasible. There are design constraints on several facilities. Some are already passed the design phase and have moved to construction phase. It was further discussed that the CWIS regulations allow for 1.) New Non-fixed facilities; 2.) New fixed facilities that do not employ sea chests as intake structures; 3.) New fixed facilities that employ sea chests as intake structures.</p> <p>EPA agreed they would not include this requirement in the permit and would remove from the fact sheet.</p>
19	Floating Solids or Visible Foam	Part I.C.1	There shall be no discharge of floating solids, visible foam or oil sheen from any source in other than trace amounts. This permit does not preclude permittees from reporting discharges/releases to the National Response Center (NRC).	Following discussion, EPA agreed to remove "discharges" and "oil sheen" from the language. The term leads to confusion with the intent of the sentence. It was not intended to have permitted discharges be called into the NRC, nor allow trace amounts of oil that could cause a sheen.
20	Treatment Chemicals	Part I.C.7	If an operator plans to apply treatment chemicals to any discharges, the quantity applied to the wastewater must comply with quantity limits set forth in Part I.B.11.a of this permit for Treatment Chemicals and the concentration of the chemical presenting in the discharge shall not cause failure of toxicity testing. Prohibition of halogenated phenolic compounds, dispersants, surfactants and detergents also apply to new treatment chemicals.	<p>Discussion on the intent of the addition and what was it referring to specifically. It was determined that this addition was referring to venders and should not be part of the NPDES permit.</p> <p>EPA agreed to remove.</p>